CLAIMS

What is claimed is:

1.   A system for managing client accounts and controlling access to resources over data networks, said system comprising:

(a)   a mechanism for sharing client information and charges among a plurality of service providers,

(b)   A client who is registered with one of the service providers (the "home provider") and is allowed to access the resources of the other service providers ("outside providers") that are part of the system,

(c)   a settling means adapted to allow the system to settle accounts among service providers by charging the home provider for access by its clients to the resources of the outside providers,

(d)   a payment means adapted to assure that the outside providers are then paid for that access through the system,

(e)   a sharing means adapted to allow the system to allow the providers to share users without requiring an open account for each user at each provider, and

(f)   a verification means adapted to allow each provider to determine if a particular client is a member of the system, verify that the client has authenticated at his home provider, and determine this client's access or service privileges and criteria.

2.   A system as recited in claim 1 by which the owner of goods may sell access to those goods across a data network such that the owner may instantaneously and simultaneously display across the network multiple differing prices of the same good or classes of goods depending upon the alternative pricing requirements of other clients of the system as transferred by the system.

3. A system as recited in claim 1, by which one member of the system may instantaneously configure the form and substance of services or goods across a data network provided to different or unique clients in response to data about the client provided by the system along with the client's request for service.

4. A system as recited in claim 1, by which one member of the system may instantaneously determine whether or what type or form of service or goods across a data network to provide to different or unique clients of the system based upon data about the client provided along with the client's request for service.

5. A system as recited in Claim 1, by which multiple members of the system may aggregate, transfer and share data about the clients of the system, in a standardized form which identifies each client by a unique alpha-numeric sequence, but where the personal identifying attributes of the client (such as name, address or credit and billing information) need be known only to the one system member responsible for enrolling the client.

6. A system as recited in Claim 1, in which a client of the system may request access to, review of, or purchase of resources or goods across a data network of members of the system on the basis of specific attributes of the client which the client elects to provide at the moment when service is requested, where such attributes are technically capable of being an integral and automatic part of the request form.

7. A system as recited in Claim 1, in which a provider of service under the system provides a client's preference, pricing and service-class information to a common service point in exchange for an authenticatable token, which the service provider then provides to its client, so that the client may in turn offer the token to multiple other service providers whose services or goods across a data network the client wishes to access, review or purchase.

8. A system as recited in Claim 7, which employees the Internet's Hyper-Text Transfer Protocol (HTTP), and has appending means adapted to appending to or include in

a Uniform Resource Locator (URL), or in a Request/Response Header, a sequence of alpha–numeric characters which includes said authenticatable token.
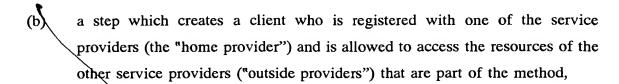
9.   A system as recited in Claim 7, which includes an acceptance means by which a client's token is accepted by a system member from whom the client wishes to receive services or goods across a data network, and is instantaneously submitted to the system's common service point, which, if the token's contents match that of a token in the common service point's dynamic session database, returns preference, pricing and service–class information about the requesting client, prior to the providing of the requested services or goods across a data network.

10.   A system as recited in Claim 9, of utilizing the User Datagram Protocol (UDP) for implementing the acceptance means.

11.   A system as recited in Claim 1, for collecting and storing at a common service point discrete records of access by clients to resources or goods across a data network of multiple members of the service, where such collection is capable of occurring instantaneously subsequent to the providing of each resource or good.

12.   A system as recited in Claim 11, by which discrete records are instantaneously sorted and stored in databases according to the identity of the service provider of the individual client whose activity resulted in the record being produced.

13.   A system as recited in Claim 1, for collecting and aggregating records of financial charges for access to, review or acquisition of services or goods across a data network such that the records may be supplied to the suppliers of client servers without knowledge of or reference to the ultimate form of payment by the client.

14.   A system as recited in Claim 1, in which the token is only "read" by the authentication server, thus permitting the token to be private–key encrypted.

15. A system as recited in Claim 1, for enabling an initiating Internet World Wide Web host to present in HyperText Markup Language (HTML) "hypertext links" which address services or goods available from multiple other receiving World Wide Web sites such that when the end user highlights or clicks the link a process is initiated whereby the receiving site is able to receive payment from an agent of the end user's account manager for access to, review or acquisition of the services or goods, without regard to whether the end user's account is maintained by the initiating WWW host or by some other service provider.

16. A system as recited in Claim 1, which includes a sequence means adapted for obtaining, transferring and maintaining among multiple network clients a unique alpha-numeric sequence associated with a specific digital information resource or object for the purpose of recording usage, for billing, payment, copyright protection, ownership control, demographic analysis or any other purpose; where the topological location of the resource on the network may not necessarily be related or relevant to the location where, or time when, the resource was originally created.

17. A system as recited in Claim 1, which includes a sequence means adapted for obtaining, transferring and maintaining among multiple network clients and their server a dynamically updated record of funds encumbered by a network user for the purchase of a digital information resource or resources such that each subsequent record of purchase in time, and the transfer to clients of an updated record of funds available or authorized to be encumbered, is accomplished.

18. A method for managing client accounts and controlling access to resources over data networks, said method comprising:

    (a)   a method for sharing client information and charges among a plurality of service providers,
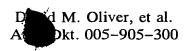
(b)   a step which creates a client who is registered with one of the service providers (the "home provider") and is allowed to access the resources of the other service providers ("outside providers") that are part of the method,

(c)   a settling step adapted to allow the method to settle accounts among service providers by charging the home provider for access by its clients to the resources of the outside providers,

(d)   a payment step adapted to assure that the outside providers are then paid for that access through the method,

(e)   a sharing step adapted to allow the method to allow the providers to share users without requiring an open account for each user at each provider, and

(f)   a verification step adapted to allow each provider to determine if a particular client is a member of the method, verify that the client has authenticated at his home provider, and determine this client's access privileges and criteria.

19.   A method as recited in claim 18 by which the owner of goods may sell access to those goods across a data network such that the owner may instantaneously and simultaneously display across the network multiple differing prices of the same good or classes of goods depending upon the alternative pricing requirements of other clients of the method as transferred by the method.

20.   A method as recited in claim 18, by which one member of the method may instantaneously configure the form and substance of services or goods across a data network provided to different or unique clients in response to data about the client provided by the method along with the client's request for service.

21.   A method as recited in claim 18, by which one member of the method may instantaneously determine whether or what type or form of service or goods across a data

network to provide to different or unique clients of the method based upon data about the client provided along with the client's request for service.
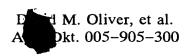
22. A method as recited in Claim 18, by which multiple members of the method may aggregate, transfer and share data about the clients of the method, in a standardized form which identifies each client by a unique alpha-numeric sequence, but where the personal identifying attributes of the client (such as name, address or credit and billing information) need be known only to the one method member responsible for enrolling the client.

23. A method as recited in Claim 18, in which a client of the method may request access to, review of, or purchase of resources or goods across a data network of members of the method on the basis of specific attributes of the client which the client elects to provide at the moment when service is requested, where such attributes are technically capable of being an integral and automatic part of the request form.

24. A method as recited in Claim 18, in which a provider of service under the method provides a client's preference, pricing and service-class information to a common service point in exchange for an authenticatable token, which the service provider then provides to its client, so that the client may in turn offer the token to multiple other service providers whose services or goods across a data network the client wishes to access, review or purchase.

25. A method as recited in claim 24, employing the Internet's Hyper-Text Transfer Protocol (HTTP), of appending to or including in a Uniform Resource Locator (URL), or in a Request/Response Header, a sequence of alpha-numeric characters which includes said authenticatable token.

26. A method as recited in claim 24, which includes an acceptance step by which a client's token is accepted by a method member from whom the client wishes to receive services or goods across a data network, and is instantaneously submitted to the method's common service point, which, if the token's contents match that of a token in the common service point's dynamic session database, returns preference, pricing and service-class

information about the requesting client, prior to the providing of the requested services or goods across a data network.

27.   A method as recited in claim 26, of utilizing the User Datagram Protocol (UDP) to accomplish the acceptance step.

28.   A method as recited in claim 18, for collecting and storing at a common service point discrete records of access by clients to resources or goods across a data network of multiple members of the service, where such collection is capable of occurring instantaneously subsequent to the providing of each resource or good.

29.   A method as recited in claim 28, by which discrete records are instantaneously sorted and stored in databases according to the identity of the service provider of the individual client whose activity resulted in the record being produced.

30.   A method as recited in Claim 18, for collecting and aggregating records of financial charges for access to, review or acquisition of services or goods across a data network such that the records may be supplied to the suppliers of client servers without knowledge of or reference to the ultimate form of payment by the client.

31.   A system as recited in Claim 18, in which the token is only "read" by the authentication server, thus permitting the token to be private-key encrypted.

32.   A method as recited in claim 18, for enabling an initiating Internet World Wide Web host to present in HyperText Markup Language (HTML) "hypertext links" which address services or goods available from multiple other receiving World Wide Web sites such that when the end user highlights or clicks the link a process is initiated whereby the receiving site is able to receive payment from an agent of the end user's account manager for access to, review or acquisition of the services or goods, without regard to whether the end user's account is maintained by the initiating WWW host or by some other service provider.

33.   A method as recited in claim 18, including the step of obtaining, transferring and maintaining among multiple network clients a unique alpha–numeric sequence associated with a specific digital information resource or object for the purpose of recording usage, for billing, payment, copyright protection, ownership control, demographic analysis or any other purpose; where the topological location of the resource on the network may not necessarily be related or relevant to the location where, or time when, the resource was originally created.

34.   A method for obtaining, transferring and maintaining among multiple network clients and their server a dynamically updated record of funds encumbered by a network user for the purchase of a digital information resource or resources such that each subsequent record of purchase in time, and the transfer to clients of an updated record of funds available or authorized to be encumbered, is accomplished.